

University of Technology, Sydney



**Audit Pricing – An Analysis of Spatial Oligopolistic
Competition Theory**

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CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Candidate

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ABSTRACT

This thesis applies spatial oligopolistic competition theory developed in Chan, Ferguson, Simunic and Stokes (2002) to analyse Big n audit firm pricing. The extant audit pricing studies have typically analysed audit service competition by grounding the audit pricing model in a perfect vs. monopoly competition theory which assumes that audit firms earn economic rents through product differentiation (e.g., Simunic 1980; Craswell, Francis and Taylor 1995; Ferguson, Francis and Stokes 2003). The spatial competition theory suggests that the traditional competition theory ignores the strategic interaction among closely competing audit firms. Under the spatial competition theory, audit firms are allowed to price discriminate and audit fees depend upon the specialization of the closest competitor. In equilibrium, audit firms gain market power by strategically choosing specialization sets that are different from their competitors to retain some distance from the closest competitor, and thus compete in pricing to earn “local” economic rents. This thesis extends the work of the two prior empirical studies of the spatial competition theory to examine whether Big n audit firms earn rents as “local monopolists” and investigate the impact of Arthur Andersen’s (AA) merger with Ernst & Young (EY) on Big n audit pricing in the Australian audit services market.

This thesis develops spatial audit pricing models using a spatial group indicator variable and a spatial ratio variable to capture the effects of the spatial distance between a client and its next closest competing auditor compared to the spatial distance between the client and its incumbent auditor. Using the data for clients of Big n auditors in the 5 Australian city offices (i.e., Sydney, Melbourne, Perth, Brisbane and Adelaide) across all years from 1998 to 2004, the results show that the spatially closer a client is to its incumbent Big n auditor’s specialization compared to its next closest competing Big n auditor, the higher the audit fees charged to the client. Stronger support for the hypotheses is provided after controlling for the number of the incumbent auditor’s competitors in client industries. In particular, these results are more apparent in the lower client concentrated industries where clients do not suffer from aversion to appointing specialist auditors. These results imply that client industry characteristics are important spatial attributes considered by audit firms when making strategic specialization investments to earn “local” economic rents. Additional

findings show that these results are also statistically more apparent in the small client segment of audit markets. The results of the tests of the impact of AA's merger with EY on Big n audit pricing offer limited support for the view that audit fees will increase for clients of the merged audit firm where the merger eliminates the predecessor audit firms' closest competitor for those clients. Overall, the results provide support for Chan et al.'s (2002) alternative interpretation of strategic competition among the Big n audit firms.

Key words: Spatial oligopolistic competition, auditor specialization, audit pricing, strategy, Arthur Andersen's merger with Ernst & Young

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